FIG.1

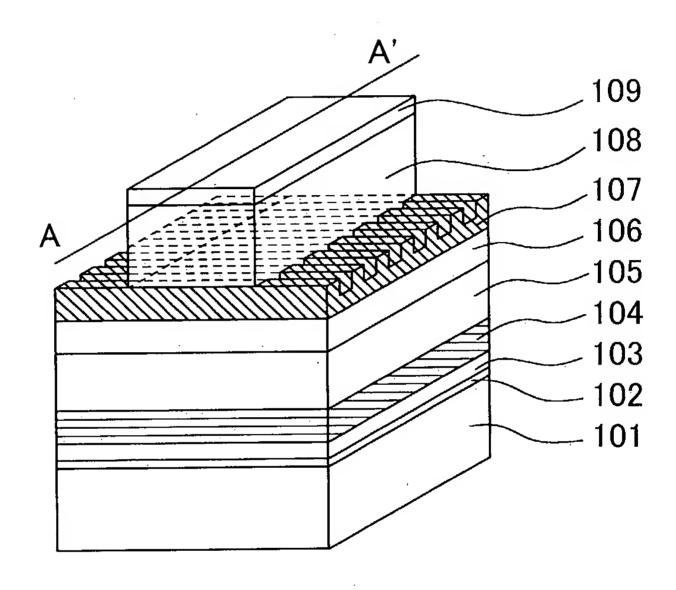


FIG.2A

**EPITAXIAL GROWTH** 

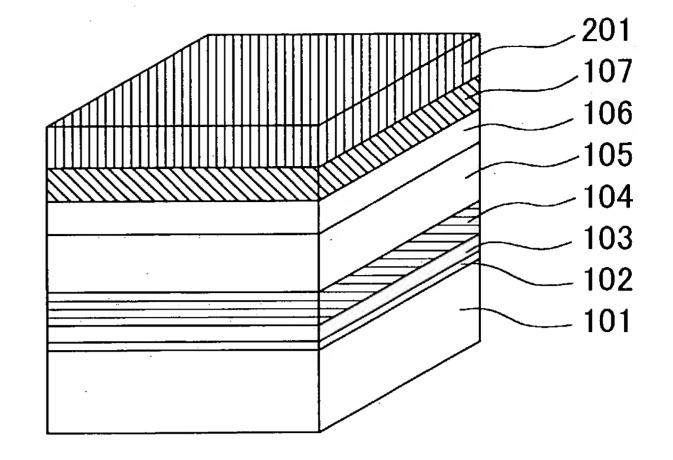


FIG.2B

FABRICATION OF GRATING

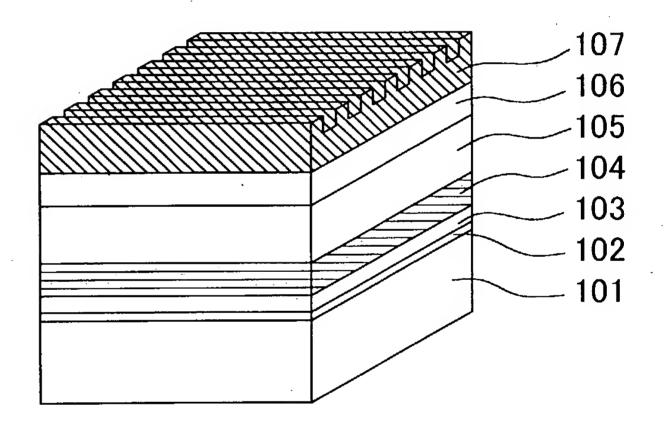


FIG.2C

**REGROWTH** 

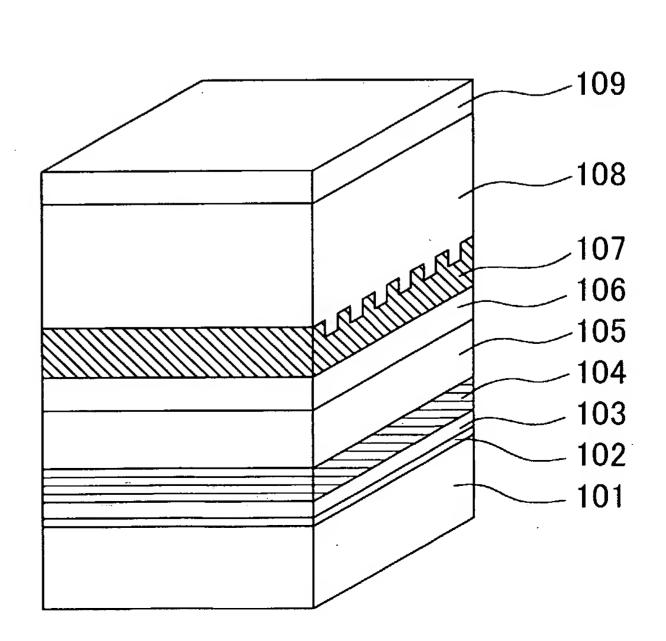


FIG.3

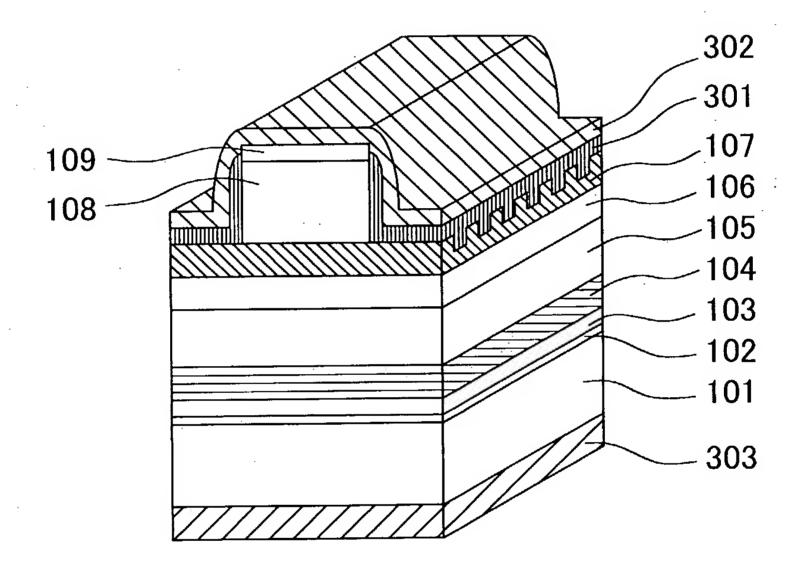


FIG.4A

CROSS SECTIONAL VIEW

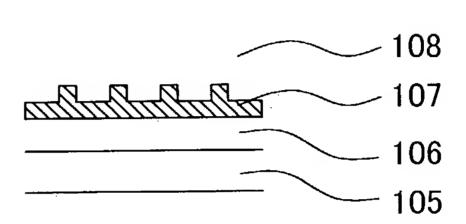


FIG.4B
BAND STRUCTURE

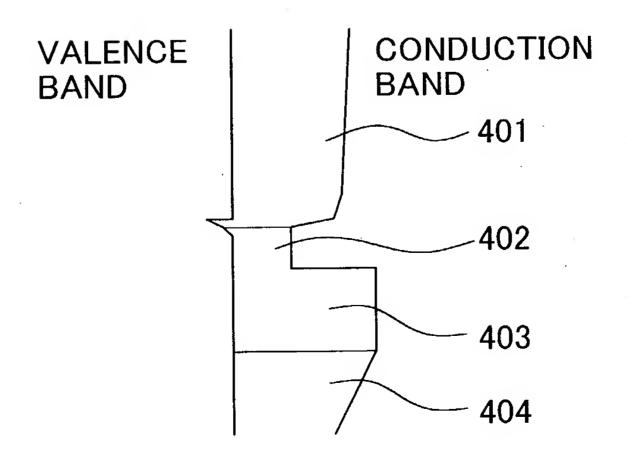


FIG.5

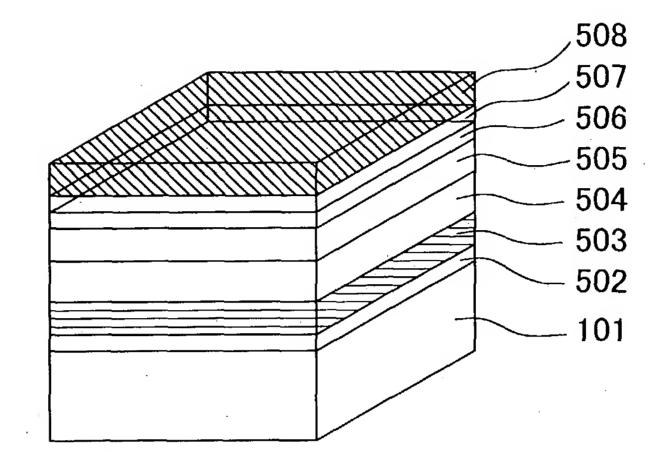


FIG.6

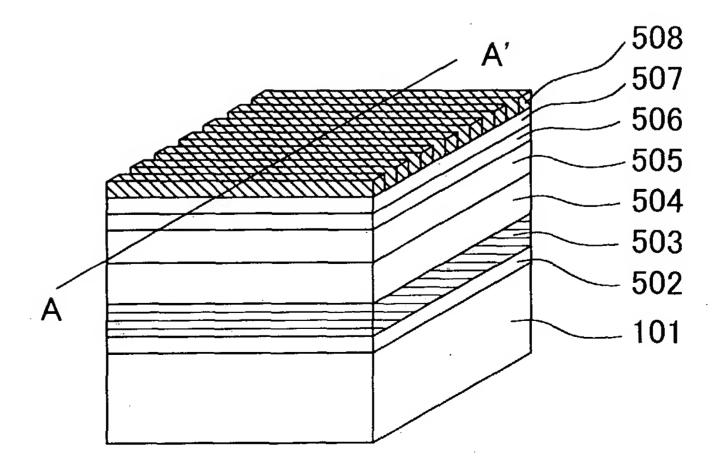


FIG.7

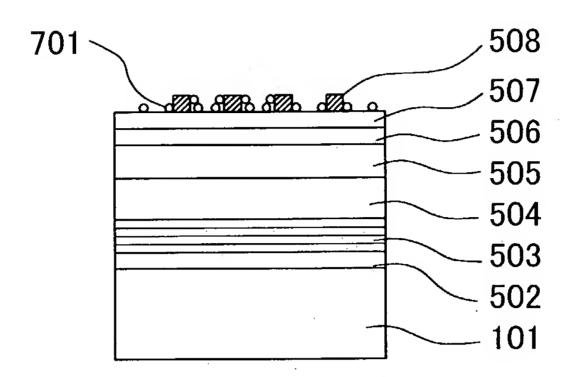


FIG.8

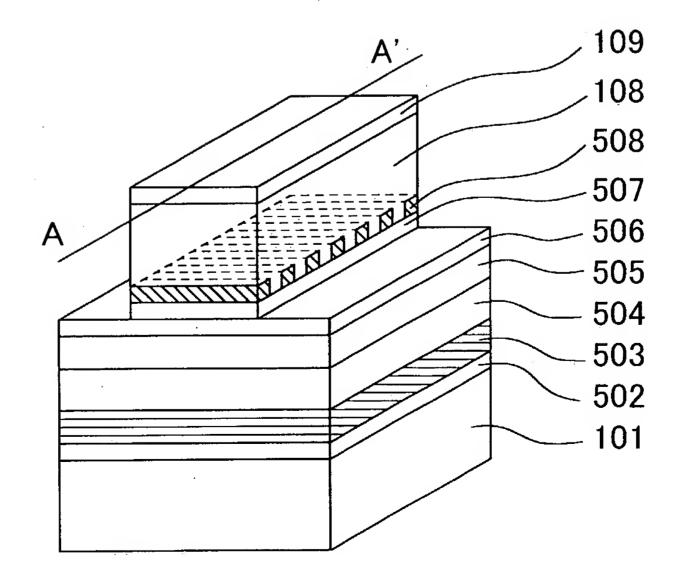


FIG.9

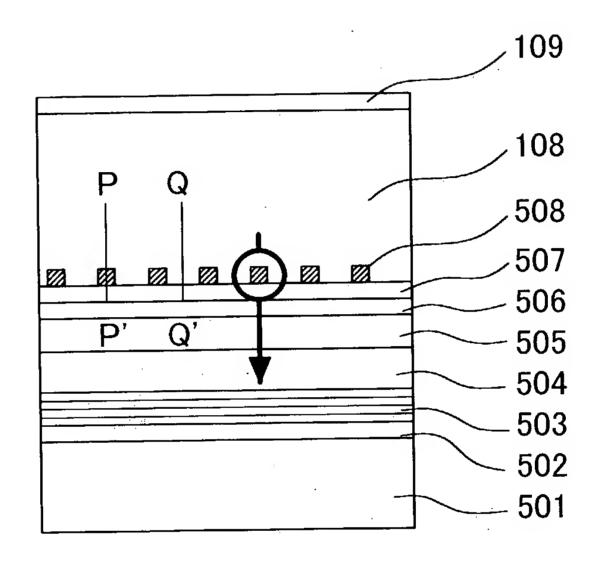


FIG.10A

P-P' CROSS SECTIONAL VIEW

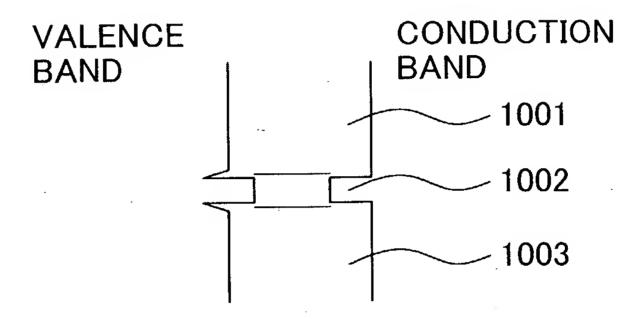
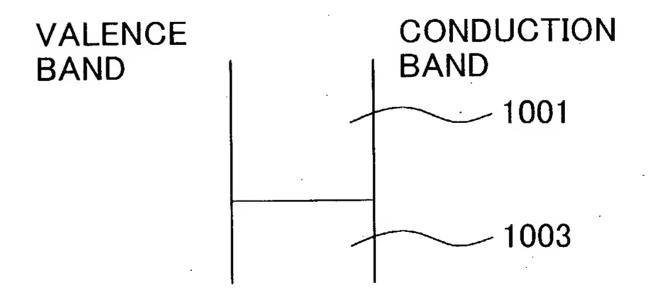


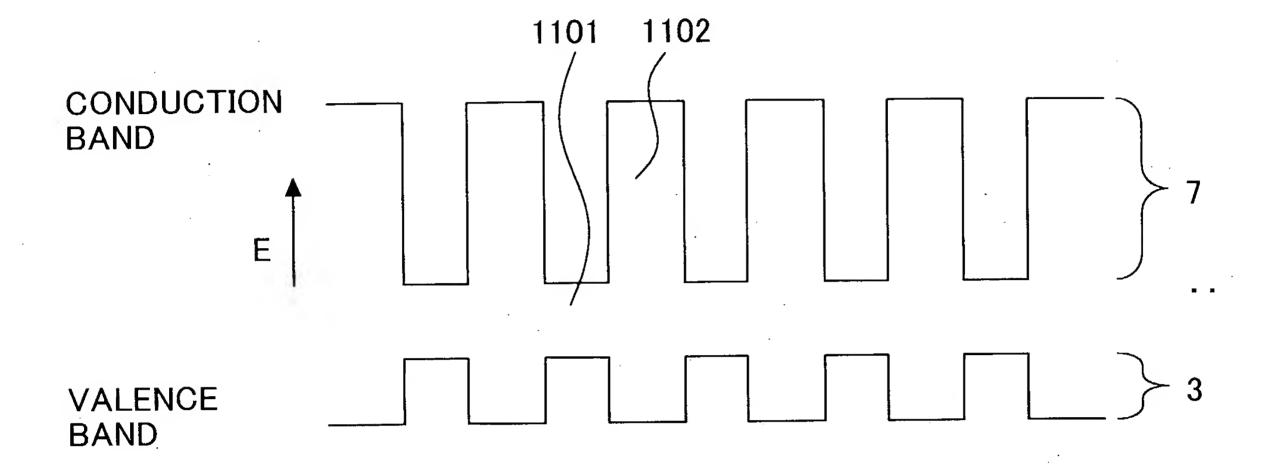
FIG.10B

Q-Q' CROSS SECTIONAL VIEW



## FIG.11A

InGaAlAs-MQW



## FIG.11B

In GaAs P-MQW

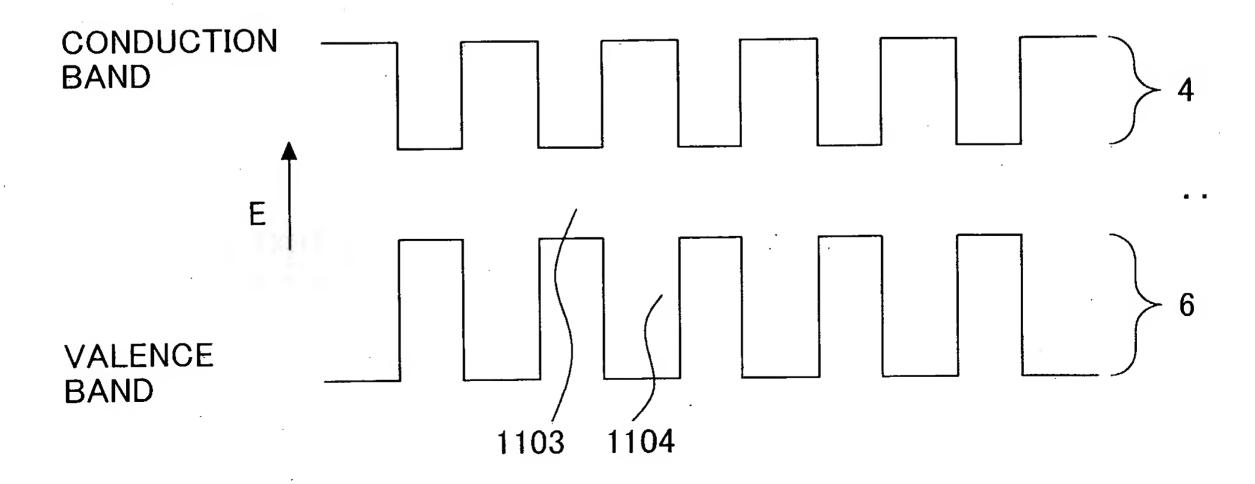


FIG.12

## **CONDUCTION BAND**

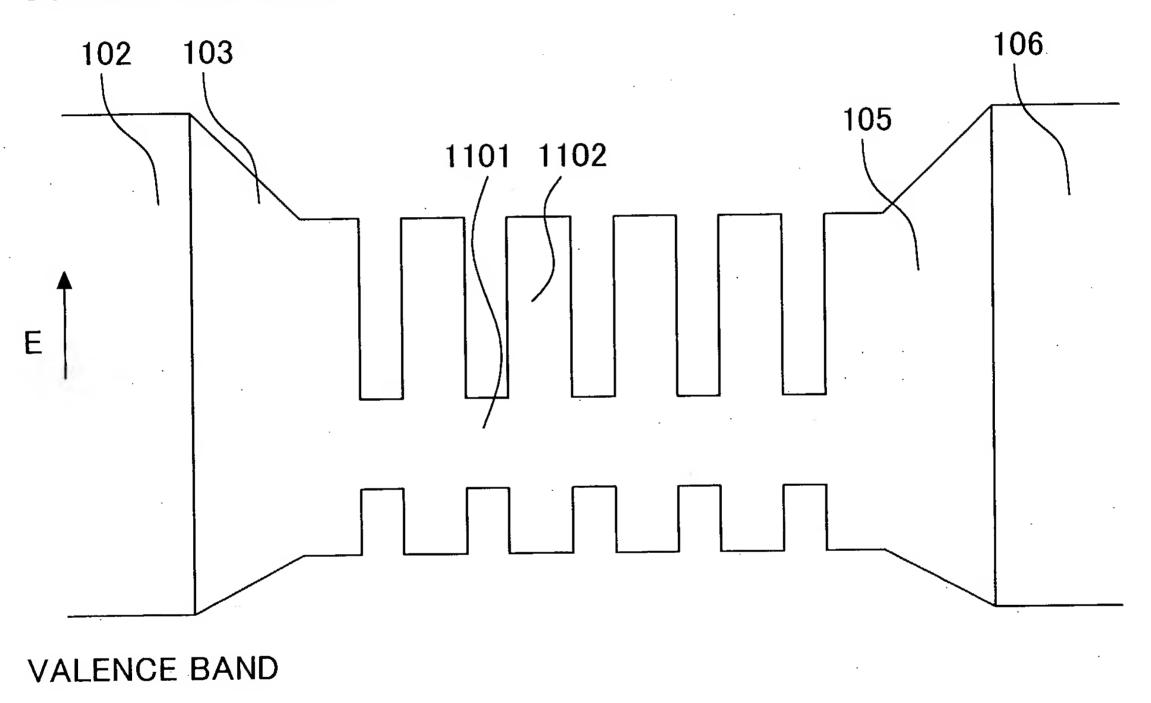
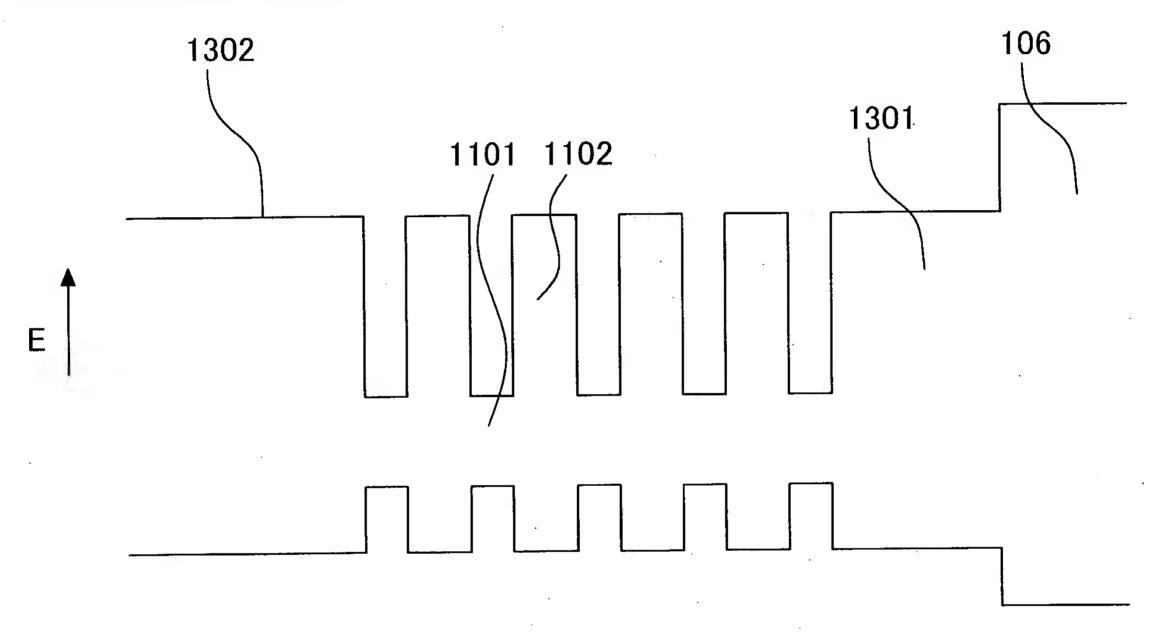


FIG.13

## **CONDUCTION BAND**



VALENCE BAND

FIG.14

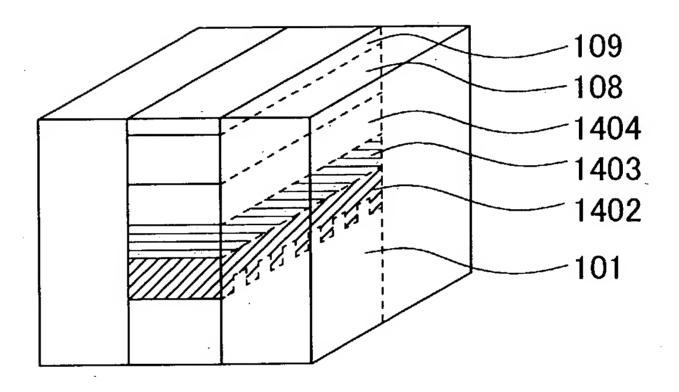


FIG.15

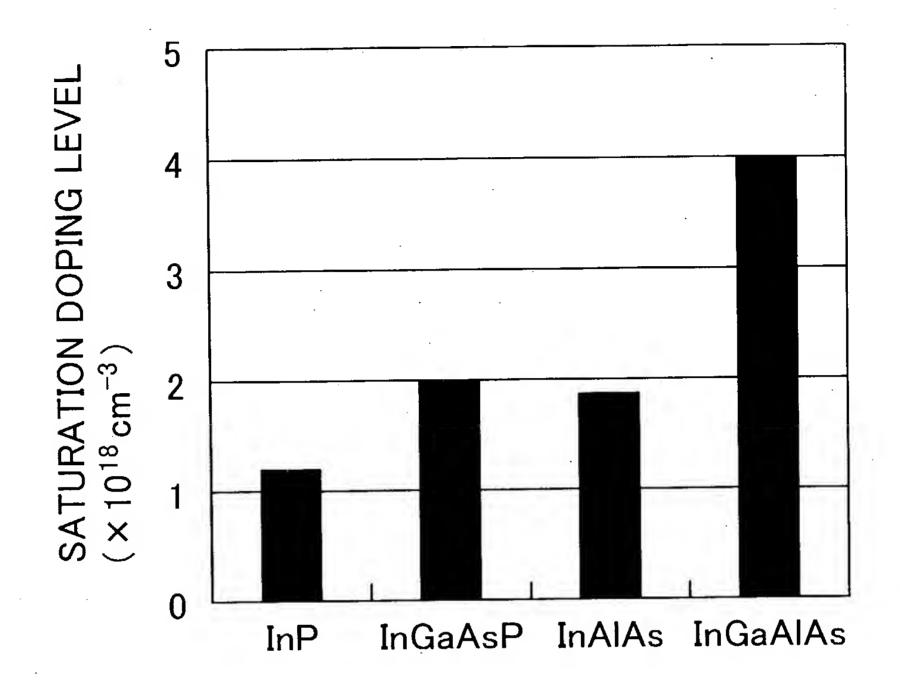


FIG.16

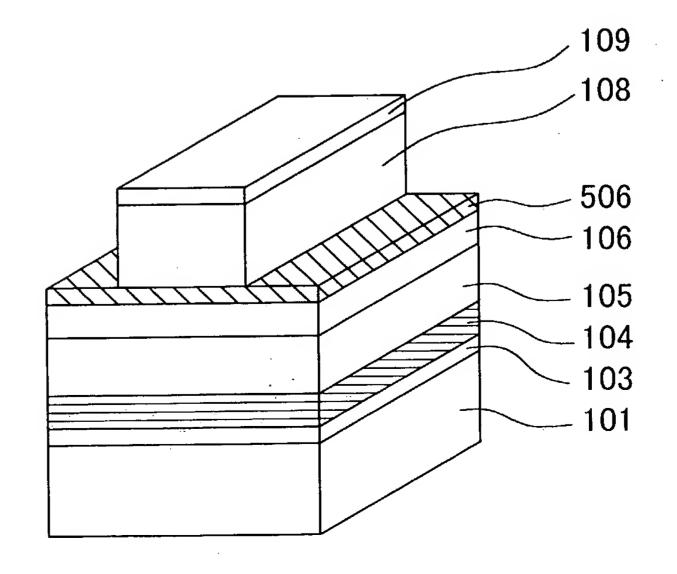


FIG.17

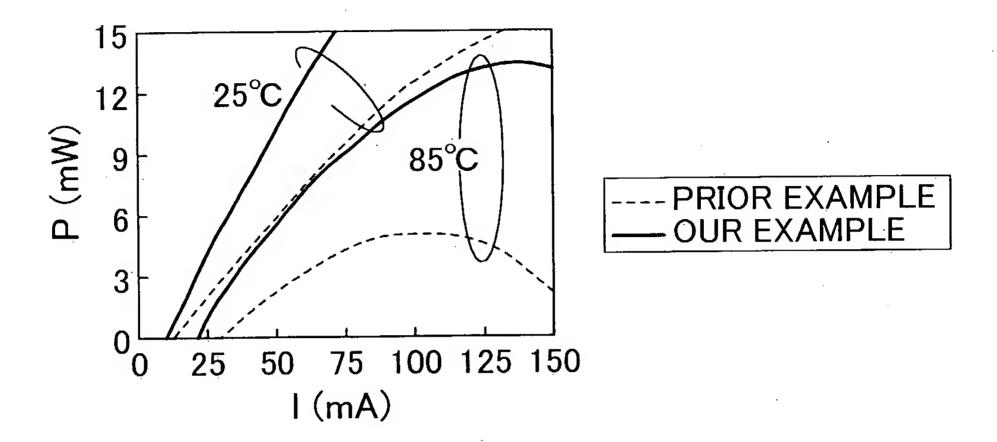


FIG.18

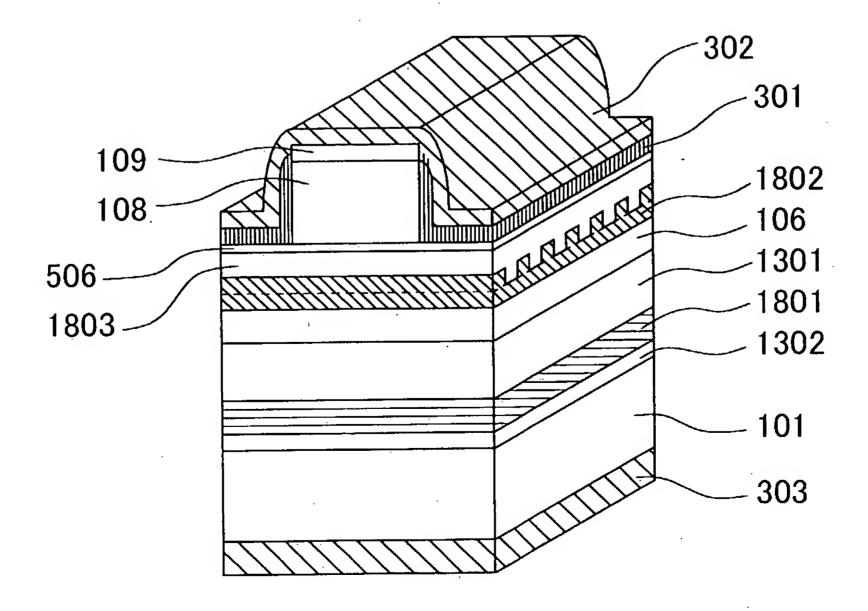


FIG.19

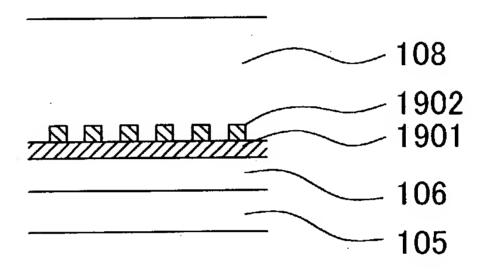


FIG.20

